

SEQUENCE LISTING

<110> Lovenberg, Timothy  
Liu, Changlu

<120> DNAs Encoding Mammalian Histamine Receptor Of The H4 Subtype

<130> PRD-0033

<150> 09/790,849  
<151> 2001-02-22

<150> 60/208,260  
<151> 2000-05-31

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<170> PatentIn version 3.2

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35 40 45

Arg Ser Ser Tyr Phe Phe Leu Asn Leu Ala Ile Ser Asp Phe Phe Val  
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305 310 315 320

Leu Phe Thr Ile Val Leu Ser Phe Tyr Ser Ser Ala Thr Gly Pro Lys  
325 330 335

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Val Asn Pro Leu Leu Tyr Pro Leu Cys His Lys Arg Phe Gln Lys Ala  
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Asn Ala Val Val Ile Leu Ala Phe Val Val Asp Arg Asn Leu Arg His			
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Arg Ser Asn Tyr Phe Phe Leu Asn Leu Ala Ile Ser Asp Phe Leu Val  
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Gly Leu Ile Ser Ile Pro Leu Tyr Ile Pro His Val Leu Phe Asn Trp  
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Asn Phe Gly Ser Gly Ile Cys Met Phe Trp Leu Ile Thr Asp Tyr Leu  
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Leu Cys Thr Ala Ser Val Tyr Asn Ile Val Leu Ile Ser Tyr Asp Arg  
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Tyr Gln Ser Val Ser Asn Ala Val Ser Tyr Arg Ala Gln His Thr Gly  
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Ile Met Lys Ile Val Ala Gln Met Val Ala Val Trp Ile Leu Ala Phe  
130 135 140

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Thr Asn Thr Lys Asp Cys Glu Pro Gly Phe Val Thr Glu Trp Tyr Ile  
165 170 175

Leu Thr Ile Thr Met Leu Leu Glu Phe Leu Leu Pro Val Ile Ser Val  
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Ala Tyr Phe Asn Val Gln Ile Tyr Trp Ser Leu Trp Lys Arg Arg Ala  
195 200 205

Leu Ser Arg Cys Pro Ser His Ala Gly Phe Ser Thr Thr Ser Ser Ser  
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Ala Ser Gly His Leu His Arg Ala Gly Val Ala Cys Arg Thr Ser Asn  
225 230 235 240

Pro Gly Leu Lys Glu Ser Ala Ala Ser Arg His Ser Glu Ser Pro Arg  
245 250 255

Arg Lys Ser Ser Ile Leu Val Ser Leu Arg Thr His Met Asn Ser Ser  
260 265 270

Ile Thr Ala Phe Lys Val Gly Ser Phe Trp Arg Ser Glu Ser Ala Ala  
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Leu Arg Gln Arg Glu Tyr Ala Glu Leu Leu Arg Gly Arg Lys Leu Ala  
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Arg Ser Leu Ala Ile Leu Leu Ser Ala Phe Ala Ile Cys Trp Ala Pro  
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Tyr Cys Leu Phe Thr Ile Val Leu Ser Thr Tyr Pro Arg Thr Glu Arg

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Pro Lys Ser Val Trp Tyr Ser Ile Ala Phe Trp Leu Gln Trp Phe Asn  
340 345 350

Ser Phe Val Asn Pro Phe Leu Tyr Pro Leu Cys His Arg Arg Phe Gln  
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Gln Asn Gln Ser Val Ser Ser  
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Arg Ser Asn Tyr Phe Phe Leu Asn Leu Ala Ile Ser Asp Phe Phe Val  
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Gly Val Ile Ser Ile Pro Leu Tyr Ile Pro His Thr Leu Phe Asn Trp  
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Asn Pro Gly Ser Gly Ile Cys Met Phe Trp Leu Ile Thr Asp Tyr Leu  
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Leu Cys Thr Ala Ser Val Tyr Ser Ile Val Leu Ile Ser Tyr Asp Arg  
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Tyr Gln Ser Val Ser Asn Ala Val Arg Tyr Arg Ala Gln His Thr Gly  
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Ile Leu Lys Ile Val Ala Gln Met Val Ala Val Trp Ile Leu Ala Phe  
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Leu Val Asn Gly Pro Met Ile Leu Ala Ser Asp Ser Trp Lys Asn Ser  
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Thr Asn Thr Glu Glu Cys Glu Pro Gly Phe Val Thr Glu Trp Tyr Ile  
165 170 175

Leu Ala Ile Thr Ala Phe Leu Glu Phe Leu Leu Pro Val Ser Leu Val

180

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190

Val Tyr Phe Ser Val Gln Ile Tyr Trp Ser Leu Trp Lys Arg Gly Ser  
195 200 205

Leu Ser Arg Cys Pro Ser His Ala Gly Phe Ile Ala Thr Ser Ser Arg  
210 215 220

Gly Thr Gly His Ser Arg Arg Thr Gly Leu Ala Cys Arg Thr Ser Leu  
225 230 235 240

Pro Gly Leu Lys Glu Pro Ala Ala Ser Leu His Ser Glu Ser Pro Arg  
245 250 255

Gly Lys Ser Ser Leu Leu Val Ser Leu Arg Thr His Met Ser Gly Ser  
260 265 270

Ile Ile Ala Phe Lys Val Gly Ser Phe Cys Arg Ser Glu Ser Pro Val  
275 280 285

Leu His Gln Arg Glu His Val Glu Leu Leu Arg Gly Arg Lys Leu Ala  
290 295 300

Arg Ser Leu Ala Val Leu Leu Ser Ala Phe Ala Ile Cys Trp Ala Pro  
305 310 315 320

Tyr Cys Leu Phe Thr Ile Val Leu Ser Thr Tyr Arg Arg Gly Glu Arg  
325 330 335

Pro Lys Ser Ile Trp Tyr Ser Ile Ala Phe Trp Leu Gln Trp Phe Asn  
340 345 350

Ser Leu Ile Asn Pro Phe Leu Tyr Pro Leu Cys His Arg Arg Phe Gln  
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Val Val Val Ile Leu Ala Phe Ile Val Asp Arg Asn Leu Arg His Arg

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40

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Ser Asn Tyr Phe Phe Leu Asn Leu Ala Ile Ala Asp Phe Phe Val Gly  
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Ala Ile Ala Ile Pro Leu Tyr Ile Pro Ser Ser Leu Thr Tyr Trp Thr  
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Ser Gly Lys Gln Ala Cys Val Phe Trp Leu Ile Thr Asp Tyr Leu Leu  
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Cys Thr Ala Ser Val Tyr Asn Ile Val Leu Ile Ser Tyr Asp Arg Tyr  
100 105 110

Gln Ser Val Ser Asn Ala Val Trp Tyr Arg Ala Gln His Ser Gly Thr  
115 120 125

Trp Lys Ile Ala Thr Gln Met Val Ala Val Trp Ile Phe Ser Phe Met  
130 135 140

Thr Asn Gly Pro Met Ile Leu Ile Ser Asp Ser Trp Gln Asn Ser Thr  
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Thr Glu Cys Glu Pro Gly Phe Leu Lys Trp Tyr Phe Ala Leu Pro  
165 170 175

Thr Ser Leu Leu Glu Phe Leu Ile Pro Ile Leu Leu Val Ala Tyr Phe  
180 185 190

Ser Ala His Ile Tyr Trp Ser Leu Trp Lys Arg Glu Lys Leu Ser Arg  
195 200 205

Cys Leu Ser His Pro Val Leu Pro Ser Asp Ser Ser Ser Asp His  
210 215 220

Gly His Ser Cys Arg Gln Asp Pro Asp Ser Arg Ala Thr Leu Pro Ala  
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Arg Lys Glu Thr Thr Ala Ser Leu Gly Ser Asp Lys Ser Arg Arg Lys  
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260 265 270

Ala Ser Lys Met Gly Phe Leu Ser His Ser Asp Ser Leu Ala Leu Gln  
275 280 285

Gln Arg Glu His Ile Glu Leu Phe Arg Ala Arg Lys Leu Ala Lys Ser  
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Leu Thr Thr Val Ile Tyr Ser Phe Phe Pro Glu Arg Asn Leu Thr Lys  
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Ser Thr Trp Tyr His Thr Ala Phe Trp Leu Gln Trp Phe Asn Ser Phe  
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Val Asn Pro Phe Leu Tyr Pro Leu Cys His Lys Arg Phe Gln Lys Ala  
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Arg Ser Ile Ser Thr  
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